Electrical/Electronics Systems

Course Information
Electrical/Electronics Systems studies the principles of electricity through operations and testing procedures and provides an introduction to electronics. Diagnostics and repair of starting and charging electrical systems are covered, in addition to practical applications of the principles of electricity. Electronic management programs are referenced and studied.

Developers:
Diesel Technology State Curriculum Committee

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Development Date: 5/6/13 and 10/3/13

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Credit Hours: 5

Course Competencies:

Students will be able to:

1. Apply Ohm’s Law
2. Identify general electrical systems components
3. Analyze basic electrical systems
4. Interpret electrical schematics and circuits
5. Identify battery construction and operating principles
6. Identify starting systems components
7. Analyze starting systems components
8. Repair starting systems
9. Identify charging systems components
10. Analyze charging systems
11. Repair charging systems
12. Inspect lighting systems
13. Repair lighting systems
14. Identify electronic components
15. Identify fault warnings
16. Demonstrate proper use of electrical/electronic service tools
17. Identify data link systems